

Results of a Health Facility Assessment Survey in Five Health Districts of Kuwait

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Abstract

Objective: To describe by means of a survey the availability, functioning and quality of health care delivery system in the public sector health districts of Kuwait.

Methods: A descriptive cross sectional survey was conducted in five health districts of Kuwait and data collection was done using structured questionnaires. The survey was based on general observation, examination of facility records, and interviews with facility personnel. The data was entered in SPSS-version 19.0, and analysis was based on type of the health facilities and district with focus on predefined indicators

Results: All the health centres in the five health districts were targeted to obtain information. Majority of health service centre suggested that training for Non-Communicable Diseases and related factors should be provided. Nearly all the centers assumed that electronic health record (EHR) is suitable for recording data regarding Non-Communicable Diseases. Nonetheless, there is need for health promotion and obesity prevention clinics in almost all the health districts.

Conclusion: There is a need for cancer screening clinics in all the districts of Kuwait. New researches and surveillance systems have been developed for Non-Communicable Diseases which can assist in lowering the incidence of such diseases in the country.

Keywords: Health facility, healthcare services, electronic health record.

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Introduction

Kuwait occupies the northwestern corner of the Gulf. It is bound in the east by the Gulf and in the southwest by Saudi Arabia and in the north and the east Republic of Iraq, with a total land area of 17818 square kilometers¹. The population is distributed in 6 governorates with highest density in Hawelli (686,421 persons which represent 27.6% of the total population)². With the decrease in the inci-

dence of communicable diseases and the increase in life expectancy, the burden of disease has shifted towards non-communicable diseases and injuries^{3,4}. Trends are showing steady increases in the incidence of coronary heart disease, cancer and accidents and injuries (mainly road traffic accidents)⁴.

Table 1. Key indicators of Kuwait regarding Healthcare Sector ⁵, *purchasing power property.**male/female

Total population	2,737,000
Gross national income per capita (PPP* international \$)	58,350
Life expectancy at birth m/f **(years)	78/79
Probability of dying under five (per 1000 live births)	11
Probability of dying between 15 and 60 years m/f (per 1 000 population)	66/50
Maternal Mortality rate (per 100,000 live births)	14
Total expenditure on health per capita (Intl \$, 2010)	1,133
Total expenditure on health as % of GDP (2010)	2.6

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Kuwait has one of the most modern health care infrastructures in the region. The healthcare network in Kuwait is the best in the Gulf region and among the finest in the world⁶. The health system consists of both public and private sectors⁷. More than 80% of all health services are provided by the public sector, mainly by the Ministry of health. Kuwaitis receive medical services at government clinics and hospitals free of charge⁷. Public healthcare is maintained by an intricate network of primary and secondary health centres and specialized hospitals and research institutions^{6,7} as shown in (Table1)⁵.

Both public and private sectors provide health and medical care, with primary health care being provided by the public sector³⁻⁸. All Kuwaitis have access to Primary Health Care (PHC) services⁹. There are 74 PHC (Primary Health Care) throughout the state across 6 health regions that provide polyclinic services^{9,10}. The services offered by them include general practitioner services and child care, family medicine, maternity care, diabetes patient care, dentistry, preventive medical care, nursing care and pharmaceuticals³⁻¹¹.

Secondary healthcare services are provided by six major hospitals: The health areas that include sequence of service rendering^{12,13}. The six health areas as follows: Capital, Hawally, Farwaniya, Ahmadi, Jahra, Sabah Specialized Health Area.

Kuwait has a complex health information system. A lot of data is generated on morbidity, mortality, vital health statistics and utilization from all levels of health care delivery. Detailed statistics are available for primary, secondary and specialized care. However, there are separate systems of data collection for preventive and curative care⁴⁻⁶.

This survey was conducted to gather information about the health facilities provided by the public sector health districts, the human resources they employ, and the services they offer. This information is intended to inform policy and program-

matic decision making. The outcome of the survey will enable the District Health centres to reposition health care delivery system in the public sector.

Overall objective of the survey was to describe the availability, functioning and quality of health care delivery system in the public sector health districts. This survey is basically an effort to establish benchmarks for setting targets and devising strategies to improve the health status of the people of Kuwait.

Methods

A descriptive cross sectional survey was conducted and data collection was done using structured questionnaires. The survey was based on general observation, examination of facility records, and interviews with facility personnel. Convenience sampling technique was used.

The Health Facility Assessment Survey covered health care facilities in the 06 governorates of Kuwait³. The data was collected from the following health districts and the health centers within the districts³⁻⁵: Ahmadi (05 health districts), Capital (16 health districts), Farwaniya (19 health districts), Hawally (90 health districts) and Jahra (10 health districts).

The areas covered within the health facilities included, availability of Clinics/Services: health promotion clinics, well-baby clinics, breast feeding promotion clinic, obesity prevention clinics, antismoking clinics, chronic disease clinics, cancer screening clinics and health education clinics, essential support services such as laboratory, availability of medications, electronic health record (EHR) and continuous Professional development, training, research and surveillance.

Sample size included all the health centres in the specific health districts were targeted to obtain information on the above mentioned areas. Data collection tool included survey instruments which were extensively reviewed by the experts was pre-tested before finalization.

Intensive training was imparted to the survey teams, which was followed by careful and effective supervision during field work. All questionnaires received from the field were edited and coded by trained editors before data entry. The data was entered and analyzed in SPSS-version 19.0, by type of the health facilities and by district with focus on predefined indicators.

Results

In Ahmadi clinics there is no provision of health promotion, obesity prevention and cancer screening clinics. However, in Capital districts almost all the centres have chronic disease and cancer screening clinics. Moreover, in Farwaniya out of the total 19 centres all have the breast feeding promotion clinics. In addition, all the centres in Jahra have chronic disease management clinics. In Hawally, about 88% of the clinics does not have cancer screening clinics. Nonetheless, there is need for health promotion and obesity prevention clinics in almost all the health districts shown in (Table 2).

Approximately two-thirds of the centres in the capital district and 10% each from the Ahmadi and Jahra district feel the need for research and surveillance on risk factors of NCDs Table 3.

Majority of the centers in all the health districts have services for health education sessions on awareness and prevention of NCDs and related factors (Table 4). In addition, the survey reports that almost all the centres have the facility of laboratory services. Moreover, except for Hawally district all the other district does not have the facility of Diabetologist.

Fig. 1. depicts the proportion of centres who thinks that electronic health records are suitable for Non- communicable diseases (NCD). Only some centres in the Hawally and Jahra district perceived that the records are not suitable for NCD.

Availability of Medications for Managing NCD in centers is presented in Fig. 2. The survey asked

about availability of medications. Majority of the centres in all the districts have medications available for managing NCDs. This trend is observed in all the health districts.

Discussion

All the health centres in the 05 health districts were targeted to obtain information. Majority of health service centre suggested that training for Non-Communicable Diseases and related factors should be provided. Nearly all the centers assumed that electronic health record (EHR) is suitable for recording data regarding Non-Communicable Diseases.

The health centers suggested the availability of clinics with regard to provision and need of health services.

Chronic disease clinics are held in all the 05 health districts. With maximum clinics being conducted in the health district of Hawally may be because they have increased number of health centers. All the health centers in the 5 health districts did not have any cancer screening clinics. Anti-smoking clinics, obesity prevention clinics and health promotion clinics are available in all the other districts other than Ahmadi Health District. Breast feeding promotion clinics are available in all the health centers of district Farwaniya but it is not available in the health district of Jahara.

The results of the survey indicate that as far as clinical practice guidelines are concerned, all the centers recommended the need of (COPD) practice guidelines. Majority of health service centre suggested that training for NCD's and related factors should be provided. Moreover, the centers show contrasting results for the need of research and surveillance regarding NCD and its related factors. Further comments can be made after prevalence of NCD is known. The health centers of Farwaniya and Hawally suggested that more drugs should be made available to manage NCD. Almost all the centers suggested that laboratory services should be available for the required tests. Nearly all the cen-

Table 2. Availability of services in 05 health districts of Kuwait

Clinics	Ahmadi			Capital			Farwaniya			Hawally			Jahra		
	Yes	No	DNK	Yes	No	DNK	Yes	No	DNK	Yes	No	DNK	Yes	No	DNK
Total Health Centre	5			16			19			90			10		
Availability of Clinics	Yes	No	DNK	Yes	No	DNK	Yes	No	DNK	Yes	No	DNK	Yes	No	DNK
Health Promotion Clinics	0	5	0	2	14	0	1	18	0	6	71	3	2	8	0
Well-Baby Clinics	1	4	0	3	13	0	1	18	0	15	65	0	4	6	0
Breast Feeding Promotion Clinic	1	4	0	3	13	0	19	0	0	78	1	1	0	10	0
Obesity Prevention Clinics	0	5	0	6	9	1	1	18	0	15	65	0	2	8	0
Anti-Smoking Clinics	0	2	0	2	14	0	3	16	0	13	67	0	1	9	0
Chronic Disease Clinics	1	2	0	15	1	0	15	4	0	48	32	0	10	0	0
Cancer Screening Clinics	0	2	0	15	1	0	0	19	0	0	80	10	0	10	0

DNK=Do not Know

Table 3. Need for researches and surveillance in the health centers of Kuwait

Districts	Ahmadi			Capital			Farwaniya			Hawally			Jahra		
	Y	N	NK	Y	N	NK	Y	N	NK	Y	N	NK	Y	N	NK
Total no of centres	05			16			19			90			10		
Risk Factors NCD	1	4	0	10	4	2	4	9	6	10	37	33	1	6	3

NCD=Non communicable diseases

Table 4. Availability of essential support services and professional development in the districts

Districts	Ahmadi			Capital			Farwaniya			Hawally			Jahra		
	Y	N	NK	Y	N	NK	Y	N	NK	Y	N	NK	Y	N	NK
Total no of centres	05			16			19			90			10		
Health Education: Awareness & prevention of NCD & related factors	5	0	0	14	0	2	11	6	2	25	16	39	6	3	1
Laboratory Services															
Availability of the required tests	4	0	1	9	5	2	17	2	0	49	9	25	4	5	1
Human Resource															
Diabetologist	0	2	1	0	7	3	0	2	1	18	13	39	0	0	3
CPD & Training															
NCDs & related risk factors	3	2	0	8	1	7	0	0	9	54	11	35	6	3	1

CPD=continuous professional development

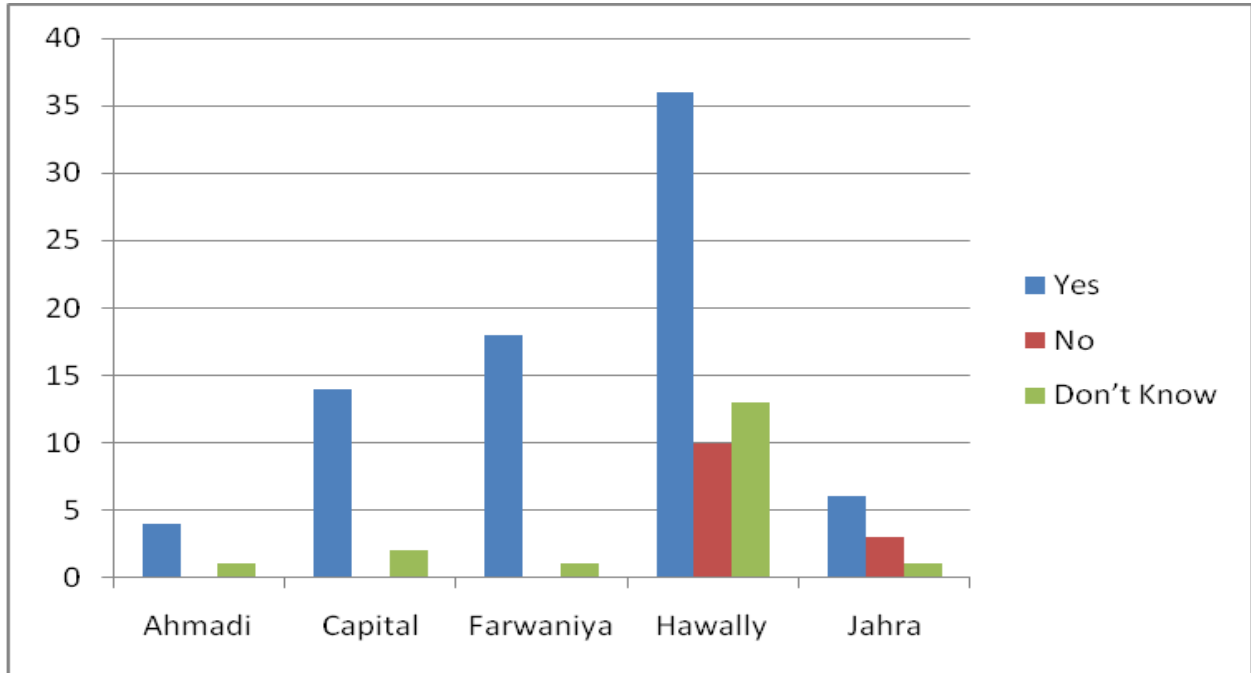


Fig 1. Proportion of Centers which think that Electronic Health Records are suitable for Non Communicable Diseases

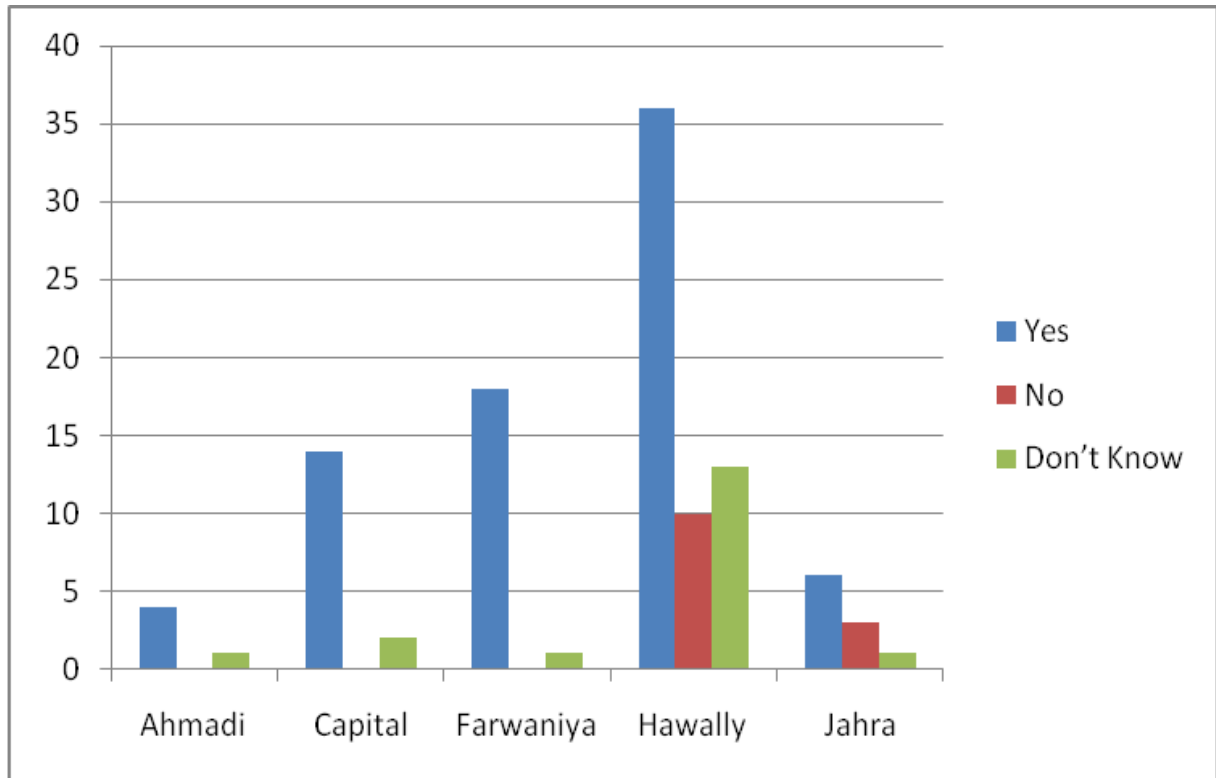


Fig 2. Availability of Medications for Managing NCD in centers of Kuwait

ters assumed that electronic health record (EHR) is suitable for recording data regarding NCD. The health awareness clinics for prevention of NCDs are conducted in all the 05 health districts. Only the Hawally health centers recommended that there should be Diabetologist in their centers. The presence of diabetologist is necessary as according to a report one third of all Riyadh hospital admissions are linked to diabetes^{14,15}. In Saudi Arabia, 24% of the population is affected by the disease, with 23% in Kuwait^{16,17}. It is also important from the healthcare expenditure point of view as it is predicted that in UAE the cost of diabetes care will be \$8.52 billion over the next 10 years alone¹⁴. Results of a study conducted by the Department of Food and Nutrition in the Ministry of Health show that the prevalence of obesity is 52.4% and 37.2% respectively for adult females and males¹⁸.

A recent report notifies that in 2010, Kuwait-Dundee collaboration was established with a view to transforming diabetes care in Kuwait wherein they have adopted a clinical network system supported by a national informatics platform, similar to the system in Scotland¹⁷. The projects up till now have developed the adult registry (KHN). Which was implemented in four primary healthcare centres in 2013, has approximately 4000 registered patients, most of whom are not yet meeting national clinical targets¹⁹. The major challenge is to develop systems for cost reduction and containment without curtailing the quality and availability of health care to all people²⁰.

Conclusion

This survey indicates a need for cancer screening clinics in all the districts of Kuwait. The presence of prevention clinics such as obesity prevention clinic, breast feeding promotion clinics can further improve the maternal and infant mortality rates. In addition, with new researches and surveillance systems developed for diseases especially for Non-Communicable Diseases; can assist in lowering the incidence of such diseases in the country.

Conflict of interest

The author has no conflict of interest and no funding/grant from any organization.

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